

REMARKS

Claims 8 , 10 through 24 and 28 through 35 and 37 through 42 are pending in this application. Claims 11, 19, 28, 31 and 34 are the independent claims. Claims 11 and 34 through 37 have been amended and claims 9 and 36 cancelled. Claims 38-42 have been added.

Claims 8 through 13, 15 through 24 and 28 through 37 were rejected under 35 U.S.C. 102(e) as being anticipated by Blomgren et al., U.S. Patent No. 6,334,183. Claim 14 was rejected under 35 U.S.C. 103(a) as being unpatentable over Blomgren in view of Zuraski, Jr. et al., U.S. Patent Number 5,737,629. Applicants respectfully traverse these rejections for the reasons set forth below.

35 U.S.C. § 102(e) Rejections

Claims 8, 10 through 13, 15 through 24, and 28 through 35 and 37 are Patentable Over the Prior Art

Claims 8 through 13, 15 through 24 and 28 through 37 were rejected under 35 U.S.C. 102(e) as being anticipated by Blomgren et al., U.S. Patent No. 6,334,183. This rejection is moot as to cancelled claims 9 and 36. As to the remaining claims in this group, Applicants respectfully traverse the Section 102 rejection. Claims 11, and 34 through 35 and 37 have been amended to better express the differences between the claimed invention and the cited art.

Regarding claim 11 in the final rejection, the Examiner states:

Blomgren has taught a method for sub-register data operations for executing an instruction, the method comprising: executing the instruction on a first register and a second register; disabling a carryover of a result of the executed instruction from low-order bit positions of a result register to the high-order bit positions of the result register (Blomgren abstract, figure 2, column 9 line 64 – column 10 line 10; since the bits that are not involved in the addition are filled by the source registers previous value, the carryover bit is left out of the register when a value is passed through; however, when all of the bits of the operands are being added, a carry bit would be carried over the carry line from the each of the LOW and HIGH adders go on to the TOP adder, with the LOW's carry also going

to the HIGH adder – this is required when adding all of the bits of the operands together to calculate the correct value. – the carryover bit would only be disabled when the values are passed through to the result register, as shown in the table in figure 2) (See Office Action, paragraph 3, page 2.);

and merging a result of the executed instruction with a plurality of high-order bits from the first register, the plurality of high-order bits being copied into high-order bit positions from the first register, the plurality of high-order bits being copied into high-order bit positions of a result register, and the result being placed into low-order bit positions of the result register (Blomgren abstract, figure 2, column 9 line 64 – column 10 line 10; as shown in figure 2, when the add BX,AX->AX instruction is executed, the unchanged portion of the register is passed though while the result of the lower portion of the registers is calculated). (See Office Action, paragraph 3, bridging page 3.)

In response to the arguments in the after-final response filed July 30, 2004 (not entered) that “the Blomgren et al. patent does not disclose or suggest ,disabling a carryover of a result of the executed instruction from low-order bit positions of the result register to high-order bit positions of the result register,’ as recited in claim 11,” and similar arguments regarding other claims, the Examiner, in his Advisory Action, takes the position that what Blomgren does, by ignoring or overwriting the carry, amounts to disabling the carry and that this meets the claim limitation.

The independent claims have now been amended to clearly indicate that the carryover bit is prevented from propagating to the higher order bits. There is no doubt, as described by the Examiner in the portion of the Final Rejection quoted above, that, in the reference, the carry bits are propagated. They may then be ignored or zeroed, but they do propagate. See, for example, Col. 11, lines 25-29. In the disclosed embodiment and as specifically claimed, propagation is prevented. This feature is further defined in the new dependent claims 38-42.

In view of the foregoing, Applicants respectfully submit that Blomgren et al. fails to disclose each and every element of the amended claims. Therefore, claims 8, 10 through 13, 15 through 24 and 28 through 35 and 37 through 42 are not anticipated and are in condition for allowance.

Accordingly, Applicants believe that claims 8 through 13 and 15 through 24, 28 through 35 and 36 through 42 are allowable over the applied art and respectfully request a notice of allowance to that effect be issued.

35 U.S.C. § 103(a) Rejections

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Blomgren et al. in view of Zuraski, Jr. et al., U.S. Patent Number 5,737,629. Applicants respectfully traverse the Section 103 rejection.

Regarding claim 14, for at least those reasons given above for claim 11, the Section 103 rejection is believed to be overcome for claim 14. Specifically, the Examiner's combination of Blomgren et al. and Zuraski, Jr. et al. fails to meet the required burden of establishing a *prima facie* case of obviousness, since there is nothing in Zuraski, Jr. et al. that makes up for the shortcomings in Blomgren et al. Therefore, the applied combination does not teach or suggest each and every claim element recited in claim 14 and Applicants respectfully submit that claim 14 is allowable. Accordingly, Applicants respectfully request that the Section 103 rejection of claim 14 be withdrawn.

CONCLUSION

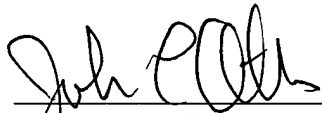
In view of the above remarks, Applicants respectfully submit that all claims are in condition for allowance, prompt notice of which is respectfully solicited.

The Examiner is invited to call the undersigned at (202) 220-4200 to discuss any information concerning this application.

The Office is hereby authorized to charge any additional fees under 37 C.F.R. § 1.16 or § 1.17 or credit any overpayment to Deposit Account No. 11-0600.

Respectfully submitted,

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